



Navigation Economic Technologies

Status:

In Progress

IWR Contact:

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Purpose:

For more than a century the U.S. Army Corps of Engineers has played a key role in keeping the nation's economy moving by ensuring that farmers, manufacturers and businesses can easily transport goods up and down our nation's rivers and out to sea via coastal ports.

As our nation's economy grows increasingly larger and more complex, though, the Corps navigation program faces a significant challenge. To ensure that our nation's navigation system remains as efficient, effective and affordable as possible, we must:

- enhance operational efficiency to improve utilization; and - upgrade infrastructure to increase system capacity.

The goal of the Navigation Economic Technologies (NETS) program is to develop a standardized and defensible knowledge base and a suite of economic tools for addressing these issues.

Improving System Utilization

NETS research activities are examining a variety of proposed solutions to ease congestion on our nation's waterways by enabling vessels to move more quickly and efficiently through locks and dams including:

- Congestion fees; - Scheduling; - Tradable locking permits; - Lockage efficiency measures; and - Locking policies. - Increasing System Capacity

NETS research efforts also are targeted at developing better tools and techniques for determining the economic impact of new capital investments. Key focus areas include:

- Analyzing shipper behavior and responses, particularly decisions to switch to non-water modes of transportation. - Assessing global market conditions, including the impact of international competition and commodity flows.

Objective:

The NETS research program has two primary focal points: expansion of the body of knowledge regarding the economics underlying use of waterways and harbors, and creation of a toolbox of practical planning models, methods and techniques that can be applied to a variety of situations.

The knowledge and tools developed by the NETS research program will be based on:

- Reviews of economic theory; - Current best practices both within and outside of the Corps; - Data needs and availability; and - Peer recommendations.

Every NETS research activity must meet four basic standards:

- Grounded in reality. Research activities must be based on accurate and complete data and all procedures, assumptions and conclusions must be well-documented.

- Intuitive. The procedures, assumptions and sensitive variables underlying research activities must be reasonably transparent to users both inside and outside of the Corps.

- Verifiable. All NETS research activities must be peer-reviewed by a panel of independent experts.

- Transportable. NETS tools and techniques must be designed so that they can be easily applied across geographic boundaries to projects of varying sizes and scopes.

Benefits:

Progress:

Products:

Related Links: • [Navigation Economic Technologies](#) *(project web site)*

Team:

Keith Hofseth poc

Partners: